

Slp Thurs 06/01

# Work Order ID 65030



January 5, 2011 1:41:20 PM

Item ID: DSI 9379-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Cargo Mirror Upgrade

Start Date: 1/05/11 Start Qty: 2.00



Cust Item ID:

Required Date: 1/05/11 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals: Process Plan: *W*

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

DSI 9379

Rev B

100

0.00



DC

Document Control

DOCUMENT CONTROL

*BB*

Memo

0.00

Photocopy DSI 9379 and create labels per PPP DSI 9379-011 CHG001

*Shalob*

*Pick Kit*

*CK for BGR 11/01/05*

*11/1/06 SP(20)*

110

QC4- 100% Inspect kits for completeness

0.00



QC

Quality Control

Memo

0.00

*Shalob*

*A*

120

Packaging

0.00



Packaging

Packaging

Memo.

0.00

Identify and pack for shipping as per PPP DSI 9379-011

*REQ A*

*Loc 20*

*11/1/06 SP(20)*

**Work Order ID 65030**

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Page 2

Item ID: DSI 9379-011

Accept

Setup Start

Revision ID:

Stop

Item Name: Cargo Mirror Upgrade

Start Date: 1/05/11 Start Qty: 2.00

Cust Item ID:

Required Date: 1/05/11 Req'd Qty: 2.00

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start

QC: Date: SPC (Y/N): Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

CF 11/01/06  
MF  
11-01-05

January 5, 2011 1:41:17 PM

**Parent Item:** DSI 9379-011

**Parent Item Name:** Cargo Mirror Upgrade

**Start Date:** 1/05/11





**Required Date:** 1/05/11

**Start Qty:** 2.00

**Required Qty: 2.00**

**Comments:** IPP Rev:A New Issue 07-06-28 JLM  
10-523 EC verified by:DD

IPP rev B 10.02.16 asper ecn

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3629-1 		Manufactured	No			110	Each	15.0000	1	2			
Bracket													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST244A				15					
				62341				15					
D3635-1 		Manufactured	No			110	Each	19.0000	1	2			
Gasket													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST076				19					
				62340				19					
D3635-3 		Manufactured	No			110	Each	27.0000	2	4			
Gasket													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				st073				27					
				64417				27					
D3646-1 		Manufactured	No			110	Each	17.0000	1	2			
Arm													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST229				17					
				62343				7					
				64413				10					

# Picklist Print

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Work Order ID: 65030

Parent Item: DSI 9379-011

Parent Item Name: Cargo Mirror Upgrade

Start Date: 1/05/11

Required Date: 1/05/11

Start Qty: 2.00

Required Qty: 2.00

D3646-3

Manufactured No

110

Each

17.0000



Arm

Location

Loc Qty

Loc Code

ST229

17

62342

7

64414

10

D4070-041

Manufactured No

110

Each

12.0000



Clamp

Location

Loc Qty

Loc Code

ST460

12

62689

12

AN3-4A

Purchased No

110

Each

997.0000



Bolt

Location

Loc Qty

Loc Code

ST350

997

104214

12

104291

300

104322

185

104374

200

104625

300

AN4-5A

Purchased No

110

Each

202.0000



Bolt

Location

Loc Qty

Loc Code

ST356

202

115016

2

115936

100

116191

100

Reste 3 Autra →

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Shop Packet Print

Page 2

# Picklist Print

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Page 3

Work Order ID: 65030

Parent Item: DSI 9379-011

Parent Item Name: Cargo Mirror Upgrade



Start Date: 1/05/11

Required Date: 1/05/11

Start Qty: 2.00

Required Qty: 2.00

AN960JD10 NAS1149D0363J Purchased No

110 Each

8.0000

6

12



S

Washer



M115622 11/1/08

## Location

## Loc Qty

## Loc Code

ST

6

107715

6

ST335

2

105792

2

AN960JD416 NAS1149D0463J Purchased No

110

Each

30.0000

4

8



S

Washer



M116289 11/1/08

## Location

## Loc Qty

## Loc Code

ST300

24

113288

24

ST356

6

115622

6

MS21042L3 Purchased No

110

Each

1,744.000

3

6



S

Nut



11/1/08 sl 20

## Location

## Loc Qty

## Loc Code

ST300

1744

114784

9

115835

831

116373

4

116391

900

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Page 3

# Picklist Print

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Page 4

Work Order ID: 65030

Parent Item: DSI 9379-011

Parent Item Name: Cargo Mirror Upgrade



Start Date: 1/05/11

Required Date: 1/05/11

Start Qty: 2.00

Required Qty: 2.00

MS21042L4

Purchased

No

110

Each

4,180.000

2

4



Nut



11/1/6 SP (20)

## Location

## Loc Qty

## Loc Code

ST300

4180

1123143

2

115589

10

115621

668

116188

3500

4

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Page 4

# REFERENCE ONLY

## DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-561 REV. C

REF. CANADIAN STC: SH91-20 ISSUE 2

REF. FAA STC: SH856NE

To reduce vibration, Dart has developed the D350-561-141/-143 Mirror Installations to replace the D350-561-041/-043 Mirror Installations. For customers with D350-561-041/-043 Mirror Installations at CHG 005 or earlier who would like to upgrade their installation, the DSI 9379-011 Upgrade Kit can be obtained from Dart. The components for DSI 9379-011 Kit are as defined in Section 1.0 below.

Customers upgrading their installation from D350-561-041/-043 to D350-561-141/-143 should follow instructions given in Figures 1 through 5 of DSI 9379 and refer to Installation Instructions D350-561 Rev. C as applicable.

Customers who are installing a D350-561-141/-143, should refer to Figures 2 through 5 of DSI 9379 and refer to Installation Instructions D350-561 Rev. C as applicable.

This service instruction details the D350-561-141/-143 kits at CHANGE 003 or later, which use D4070-041 Clamps (replaces MS21919WDG7 clamps). For -141/-143 kits at earlier change numbers, the DSI-9379-013 Upgrade kit is available to replace the mil-spec clamps with more robust D4070-041 Clamps.

### 1.0 PARTS LIST

Qty -141	Qty -143	Qty -045	Qty -011	Qty -013	Part Number	Description
X	1				D350-561-141	SINGLE MIRROR INSTALLATION (REPLACES -041)
	X				D350-561-143	DUAL MIRROR INSTALLATION (REPLACES -043)
	1	X			D350-561-045	MIRROR KIT
			X		DSI-9379-011	UPGRADE KIT
				X	DSI-9379-013	UPGRADE KIT
1		1			D2011-101	MIRROR
1					D2012-105	ARM
1					D2012-107	CLEVIS
1					D2012-111	BRACKET
		2			D2012-113	CLAMP
1					D2012-115	BRACKET
2					D2022-101	SPACER
1*		1*			D3014-1	LOCKNUT
1			1		D3629-1	BRACKET
1			1		D3635-1	GASKET
2			2		D3635-3	GASKET
1			1		D3646-1	ARM
1			1		D3646-3	ARM
2			2	2	D4070-041	CLAMP
3			3		AN3-4A	BOLT
1					AN3-6A	BOLT
3			2	2	AN4-5A	BOLT
1					AN4-10A	BOLT
8			6		AN960JD10	WASHER
8			4	4	AN960JD416	WASHER
1*		1*			AN960JD416L	WASHER
4			3		MS21042L3	NUT (OR MS21042-3)
4			2	2	MS21042L4	NUT (OR MS21042-4)

\*INCLUDED AS PART OF D2011-101 MIRROR

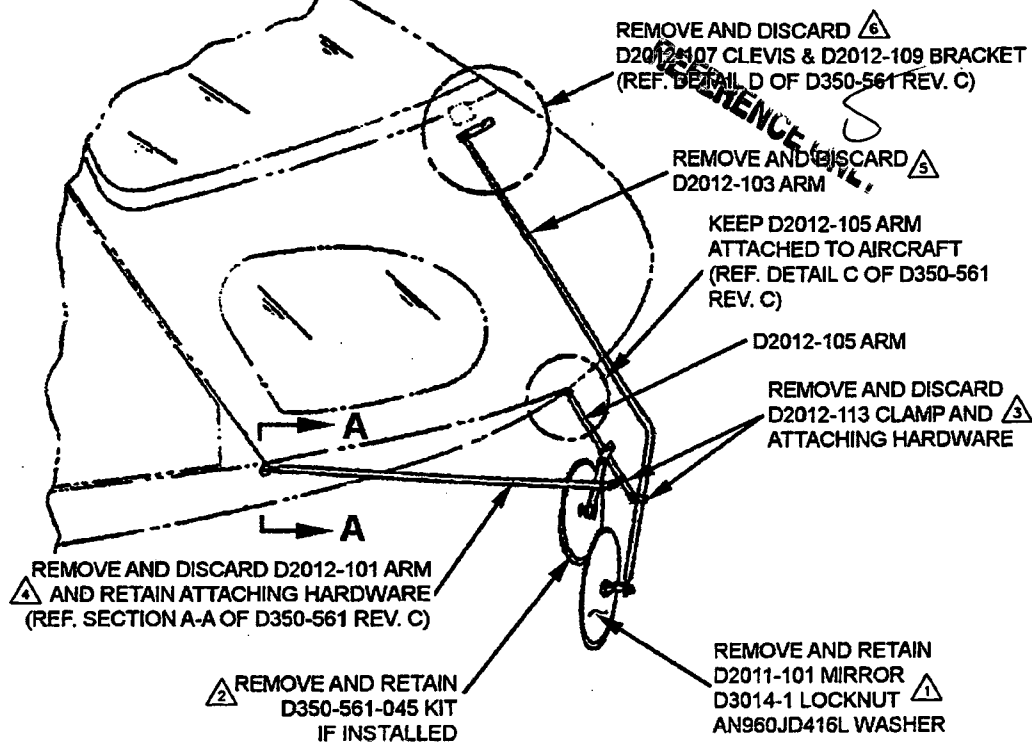
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DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY: *D. Shepherd*  
D. SHEPHERD (DE # 02)

DATE: 10.02.12  
CERT. NO.: SH91-20  
ISSUE NO.: 2

C	D4070-041 WAS MS21919WDG7	CP	10.02.12
B	MS21919WDG7 WAS MS21929WDG7	DC	07.11.26
A	NEW ISSUE	MB	07.07.10
REV.	DESCRIPTION	BY	DATE
DESIGN		<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		DSI 9379	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		CARGO MIRROR UPDRAGE KIT	NTS
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**FIGURE 1: REMOVAL OF D350-561-041/-043  
FOR CONVERSION TO D350-141/-143**

**2.0 REMOVAL (IF CONVERTING FROM -041/-043 TO -141/-143 USING  
DSI 9379-011)**

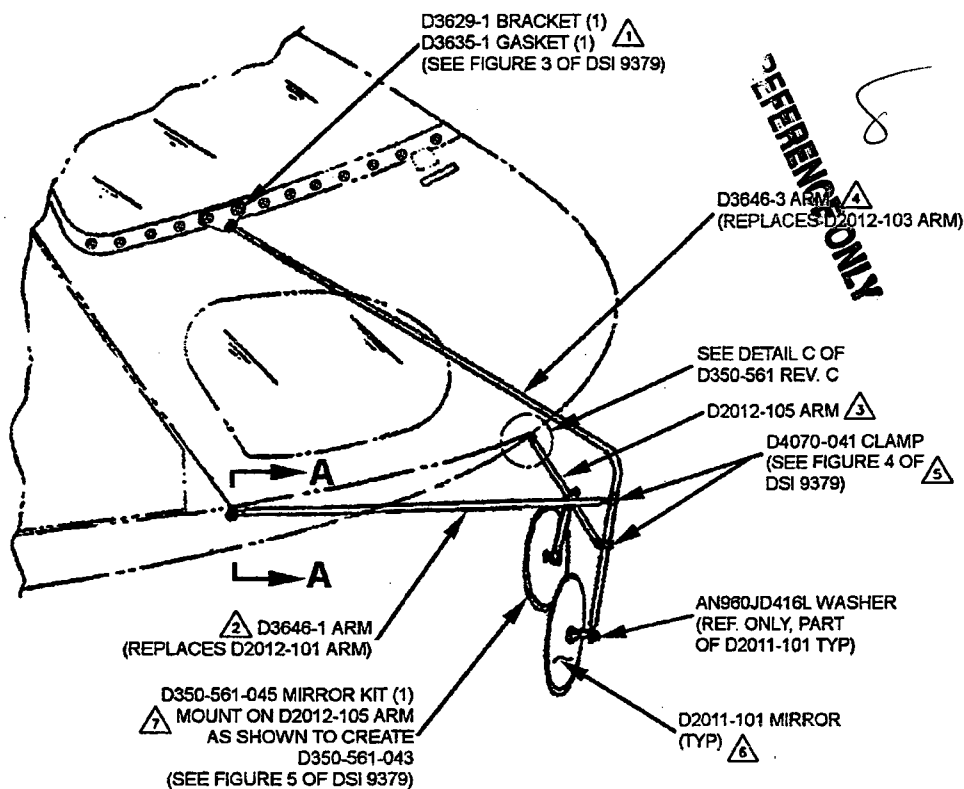
- 1) REMOVE AND RETAIN D2011-101 MIRROR AND ATTACHING FASTENERS.
- 2) REMOVE AND RETAIN D350-561-045 KIT.
- 3) REMOVE AND DISCARD D2012-113 CLAMPS AND ATTACHING HARDWARE (2 PLACES).
- 4) REMOVE AND DISCARD D2012-101 ARM. LEAVE D2012-115 BRACKET AND HARDWARE ATTACHED TO THE AIRCRAFT.
- 5) REMOVE AND DISCARD D2012-103 ARM.
- 6) REMOVE AND DISCARD D2012-107 CLEVIS. AT THE INSTALLER'S DISCRETION, THE D2012-109 BRACKET CAN BE REMOVED OR CAN REMAIN INSTALLED. WHETHER OR NOT THE D2012-109 BRACKET IS BEING REMOVED, ENSURE BOTH SCREWS ARE RE-INSTALLED.

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**FIGURE 2: D350-561-141/-143 INSTALLATIONS**

### 3.0 INSTALLATION

- 1) INSTALL D3629-1 BRACKET AND D3635-1 GASKET USING EXISTING SCREWS ON WINDOW. IT IS ACCEPTABLE TO SUBSTITUTE SCREWS WITH LONGER SCREWS OF SAME TYPE.
- 2) INSTALL D3646-1 ARM PER SECTION A-A OF D350-561 REV. C. **NOTE:** D3646-1 REPLACES D2012-101.
- 3) INSTALL D2012-105 ARM PER DETAIL C OF D350-561 REV. C.
- 4) INSTALL D3646-3 ARM. **NOTE:** D3646-3 REPLACES D2012-103.
- 5) ATTACH D3646-1 ARM AND D2012-105 ARM TO D3646-3 ARM USING D4070-041 CLAMPS.
- 6) MOUNT D2011-101 MIRROR ONTO D2012-103 ARM.
- 7) IF INSTALLING THE D350-561-143 KIT, INSTALL D350-561-045 MIRROR KIT PER FIGURE 5 OF DSI 9379.

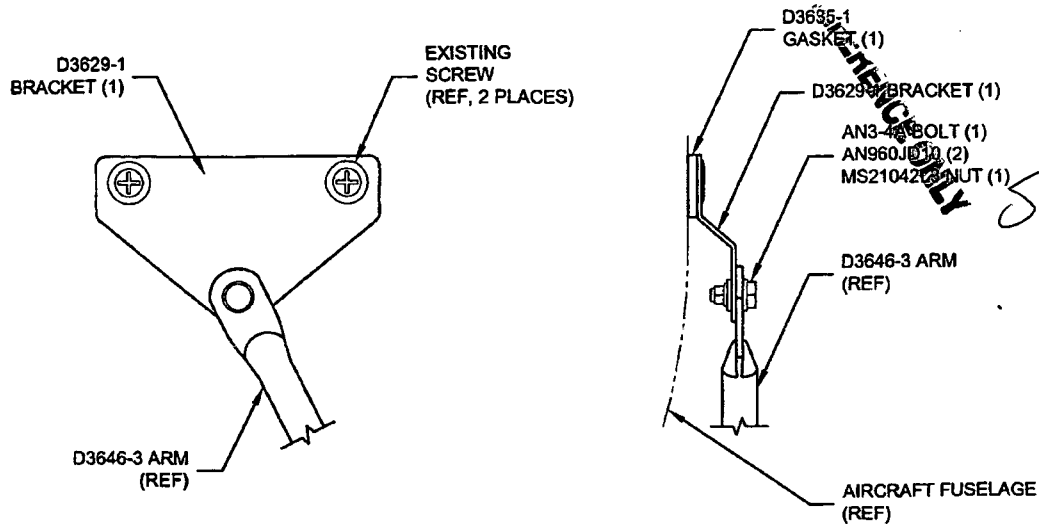
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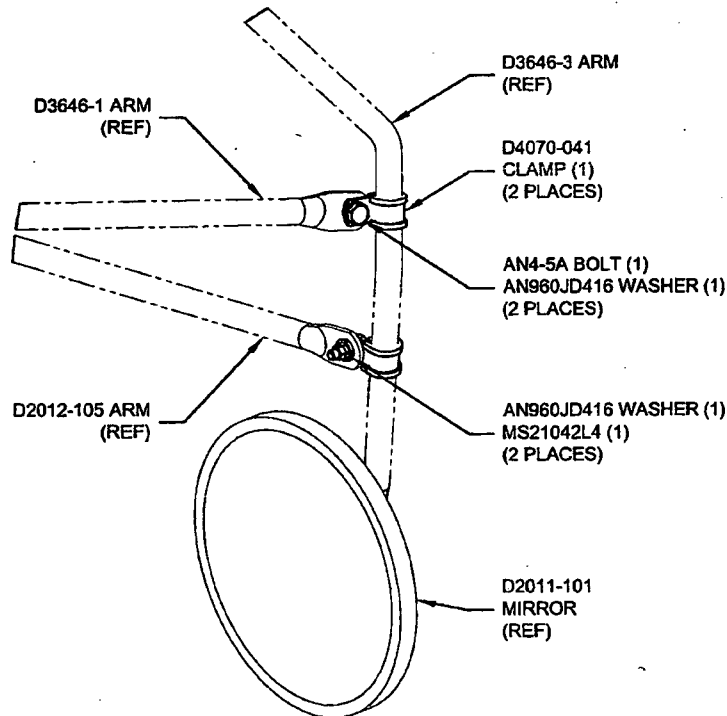
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**FIGURE 3: D3629-1 BRACKET/D3646-3 ARM INSTALLATION**



**FIGURE 4: D4070-041 CLAMP INSTALLATION**

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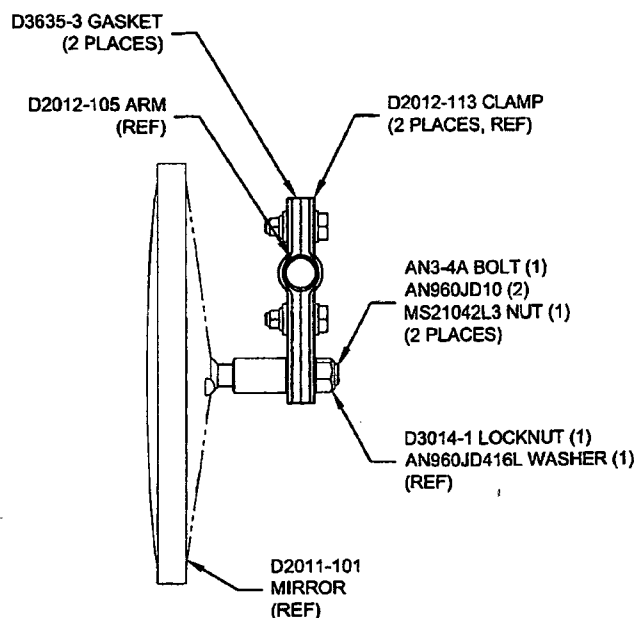
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**FIGURE 5: D350-561-045 INSTALLATION**

#### 4.0 WEIGHT AND BALANCE

The following is the weight and balance information for the **D350-561-141 Single Mirror Kit** and the **D350-561-143 Dual Mirror Kit**.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
<b>D350-561-141</b> <b>Single Mirror Installation</b>	2.5 lb 1.1 kg	+36.1 in +0.92 m	+90.3 in-lb +1.0 m-kg	9.0 in 0.23 m	22.5 in-lb 0.25 m-kg
<b>D350-561-143</b> <b>Dual Mirror Installation</b>	3.2 lb 1.5 kg	+36.1 in +0.92 m	+115.5 in-lb +1.4 m-kg	8.8 in 0.22 m	28.2 in-lb 0.33 m-kg

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